ABSTRACT OF THE DISCLOSURE

The present invention provides a method of treating auto-immune diseases in an animal comprising the step of orally administering a type one interferon to said animal. Also provided is a method of reducing inflammation associated with an auto-immune disease in an animal comprising the step of orally administering a type one interferon to said animal. Further provided is a method of decreasing the levels of a cytokine in an individual having multiple sclerosis, comprising the step of orally administering a type one interferon to said individual, wherein said cytokine is selected from the group consisting of TGF-β, IL-2, IL-10, IFN-γ and the inflammatory soluble serum marker ICAM-1. In addition, the present invention provides a method of decreasing the incidence of insulin-dependent diabetes mellitus in at-risk populations, comprising the step of orally administering INF-α to individuals of said at-risk population.